



# **FOOD HABITS AND OBESITY IN DEVELOPING ECONOMIES: FOOD AWAY FROM HOME AND THE IMPACTS ON OBESITY IN BRAZIL**

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# INTRODUCTION (I)

- Obesity is considered a worldwide epidemic which causes:
  - Approximately 2.8 million deaths per year,
  - Many diseases such as heart disease, diabetes and some types of cancer (Global Status Report, 2010).

## Obesity in Brazil

Data	Men	Women
2002-2003	8.9%	13.1%
2008-2009	12.5%	16.9%

## Overweight

Data	Men	Women
2002-2003	41.1%	40%
2008-2009	50.1%	48.0%

## INTRODUCTION (II)

- Some factors which have contributed to obesity:
  - Economic growth
  - Mechanization of agriculture
  - Movement of population to urban centers, where people have acquired new habits, such as the intake of high calorie, fatty and processed foods, and decreased physical activity (Lerario *et al.*, 2006).



# OBJECTIVES

- This study aims to **describe spending on food away from home in Brazil**, as well as to verify the existence of relationships between income, total expenditure on food away from home (FAFH) and the prevalence of overweight and obesity.



# RESULTS (I)

2002-2003	2008-2009
<p><b>Average</b> Spending on food at home: 75,95% Spending on FAFH: <b>24.05%</b></p>	<p><b>Average</b> Spending on food at home: 68,9% Spending on FAFH: <b>31.1%</b></p>
<p><b>Family income equal to 2X the Minimum Wages</b> Spending on food at home: 88,19% Spending on FAFH: <b>11.81%</b></p>	<p><b>Family income equal to 2X the Minimum Wages</b> Spending on food at home: 82,2% Spending on FAFH: <b>17.2%</b></p>
<p><b>Family income equal to 20X Minimum Wages</b> Spending on food at home: 62,95% Spending on FAFH: <b>37.05%</b></p>	<p><b>Family income equal to 25X Minimum Wages</b> Spending on food at home: 50,7% Spending on FAFH: <b>49.3%</b></p>

# RESULTS (II)

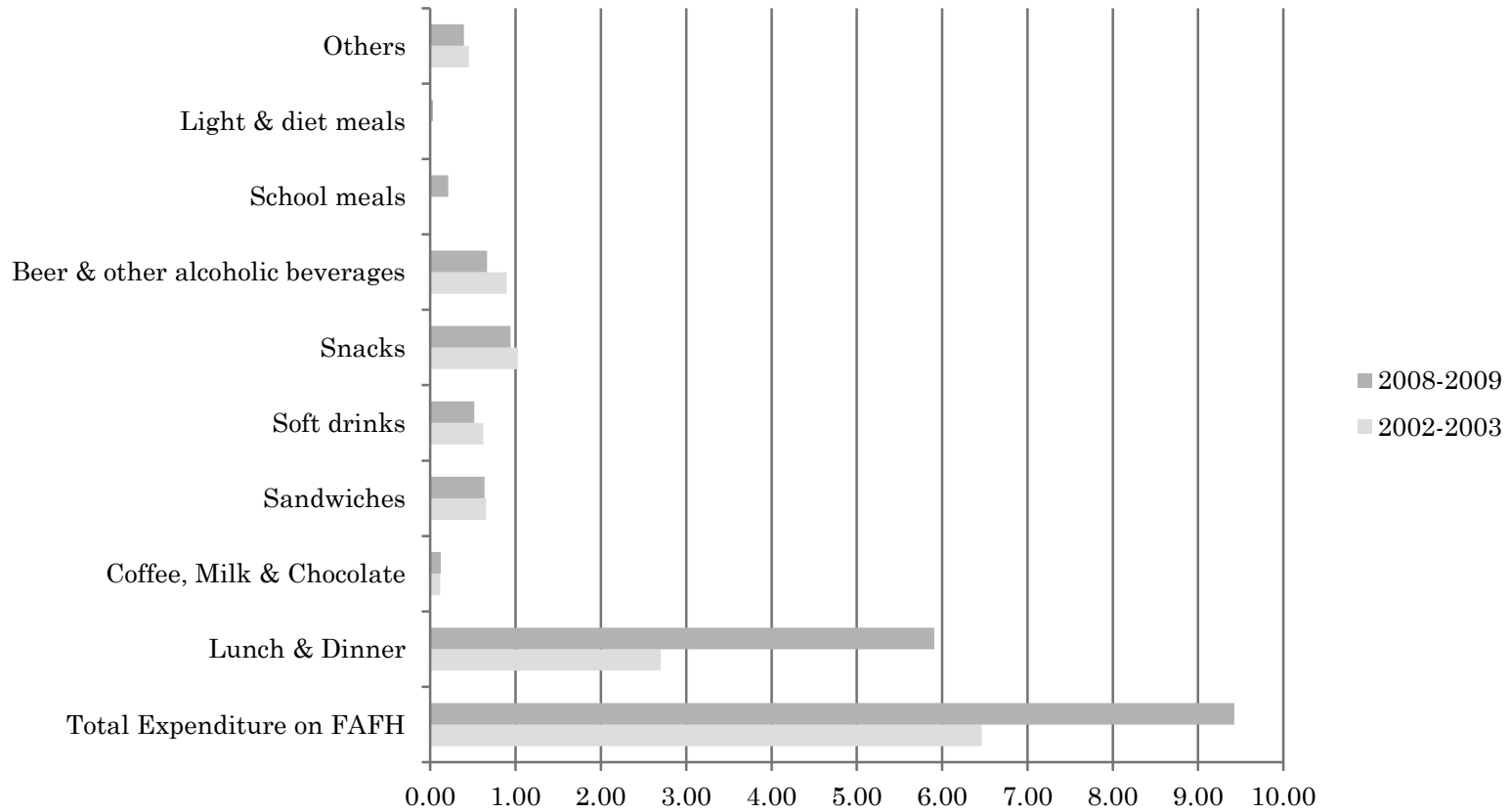


Figure 1. Individual monthly expenditure by type of food (%)



## RESULTS (III)

Table 2. Prevalence of obesity in the adult population (%) according to the class of family money income (minimum wages) *per capita* in 2002-2003 and 2008-2009

Income class	2002-2003		2008-2009	
	Men	Women	Men	Women
Up to 1/4 MW	2.7	8.8	5.5	15.1
1/4 to 1/2 MW	4.1	12.7	6.9	14.6
1/2 to 1 MW	7.6	13.0	9.6	16.3
1 to 2 MW	8.8	<b>14.4</b>	13.3	<b>18.0</b>
2 to 5 MW	11.0	<b>13.7</b>	16.1	<b>18.1</b>
Above 5 MW	<b>13.5</b>	11.7	<b>17.1</b>	15.8

Note: MW = minimum wage.

Source: Compiled from 2002-2003 and 2008-2009 Survey of Family Budgets.

## RESULTS (IV)

**Table 3.** Prevalence of overweight in the adult population (%) according to the class of family money income (minimum wages) *per capita* class 2002-2003 and 2008-2009

Income class	2002-2003		2008-2009	
	Men	Women	Men	Women
Up to 1/4 MW	21.3	32.1	30.9	43.8
1/4 to 1/2 MW	26.2	39.6	37	44.2
1/2 to 1 MW	35.3	<b>41.2</b>	43.7	47.8
1 to 2 MWs	40.7	<b>42.4</b>	51.5	<b>49.9</b>
2 to 5 MWs	48.6	<b>40.9</b>	58.7	<b>49.1</b>
Above 5 MWs	<b>56.2</b>	35.7	<b>63.2</b>	45.7

Note: MW = minimum wage.




# FINDINGS

- Average spending on FAFH increased significantly as individual income rose.
- Overweight and obesity are most prevalent among individuals in the highest income brackets, especially among men.
- The data suggest that the higher the income per person, the greater the spending on FAFH and the greater the likelihood of overweight and obesity.
- Consumption of FAFH may have contributed to the prevalence of overweight and obesity.



# RECOMMENDATIONS

- Some strategies which may help to control obesity include:
    - Increasing the availability of healthy foods in restaurants;
    - Regulatory measures regarding food-related advertising and higher nutritional standards for processed foods.
    - Increased nutritional education which may contribute to healthier lifestyle choices.
    - Incentivize improvements in the quality of food served in public institutions.
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- Thanks for your attention!

